

AZIMUTH PATTERN Horizontal Polarization

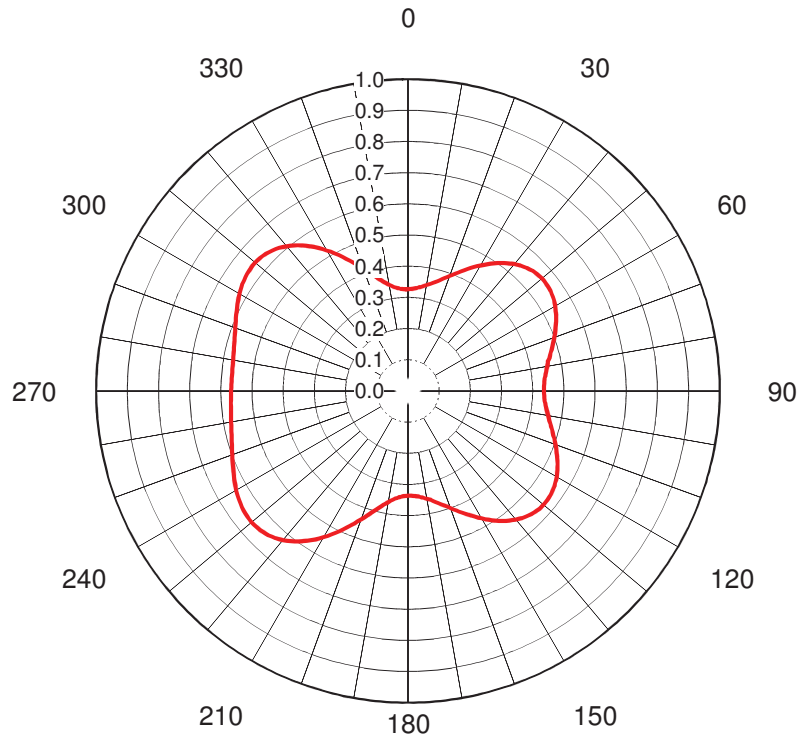
Proposal No. **C-70006**
 Date **11-Feb-17**
 Call Letters **WVTV 27**
 Frequency **551 MHz**
 Antenna Type **TFU-19JSC/VP-R SP 4C170**

 Gain **1.67 (2.22dB)**
Calculated

 Directional
 Drawing # **9_5-POLE_4SLOTS_HI**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.854	36	0.687	72	0.513	108	0.513	144	0.687	180	0.854	216	0.805	252	0.940	288	0.940	324	0.805
1	0.854	37	0.679	73	0.513	109	0.513	145	0.695	181	0.854	217	0.805	253	0.946	289	0.935	325	0.805
2	0.853	38	0.671	74	0.514	110	0.513	146	0.703	182	0.854	218	0.805	254	0.952	290	0.929	326	0.806
3	0.852	39	0.663	75	0.514	111	0.513	147	0.711	183	0.854	219	0.805	255	0.957	291	0.923	327	0.807
4	0.852	40	0.654	76	0.515	112	0.513	148	0.719	184	0.853	220	0.805	256	0.962	292	0.917	328	0.808
5	0.850	41	0.646	77	0.516	113	0.514	149	0.726	185	0.852	221	0.806	257	0.967	293	0.911	329	0.809
6	0.849	42	0.638	78	0.517	114	0.515	150	0.734	186	0.852	222	0.807	258	0.972	294	0.904	330	0.810
7	0.847	43	0.630	79	0.518	115	0.517	151	0.741	187	0.851	223	0.808	259	0.976	295	0.898	331	0.811
8	0.845	44	0.623	80	0.519	116	0.518	152	0.749	188	0.849	224	0.810	260	0.980	296	0.892	332	0.813
9	0.843	45	0.615	81	0.520	117	0.520	153	0.756	189	0.848	225	0.812	261	0.983	297	0.886	333	0.815
10	0.840	46	0.607	82	0.520	118	0.523	154	0.762	190	0.847	226	0.813	262	0.987	298	0.880	334	0.816
11	0.837	47	0.600	83	0.521	119	0.526	155	0.769	191	0.845	227	0.816	263	0.990	299	0.875	335	0.818
12	0.834	48	0.593	84	0.522	120	0.528	156	0.776	192	0.843	228	0.818	264	0.993	300	0.869	336	0.820
13	0.831	49	0.586	85	0.523	121	0.532	157	0.782	193	0.842	229	0.821	265	0.995	301	0.864	337	0.822
14	0.827	50	0.579	86	0.523	122	0.536	158	0.788	194	0.840	230	0.824	266	0.997	302	0.858	338	0.824
15	0.823	51	0.573	87	0.524	123	0.540	159	0.794	195	0.838	231	0.828	267	0.998	303	0.853	339	0.826
16	0.819	52	0.566	88	0.524	124	0.545	160	0.799	196	0.836	232	0.831	268	0.999	304	0.848	340	0.828
17	0.814	53	0.561	89	0.524	125	0.550	161	0.804	197	0.834	233	0.835	269	1.000	305	0.844	341	0.830
18	0.810	54	0.555	90	0.524	126	0.555	162	0.810	198	0.832	234	0.839	270	1.000	306	0.839	342	0.832
19	0.804	55	0.550	91	0.524	127	0.561	163	0.814	199	0.830	235	0.844	271	1.000	307	0.835	343	0.834
20	0.799	56	0.545	92	0.524	128	0.566	164	0.819	200	0.828	236	0.848	272	0.999	308	0.831	344	0.836
21	0.794	57	0.540	93	0.524	129	0.573	165	0.823	201	0.826	237	0.853	273	0.998	309	0.828	345	0.838
22	0.788	58	0.536	94	0.523	130	0.579	166	0.827	202	0.824	238	0.858	274	0.997	310	0.824	346	0.840
23	0.782	59	0.532	95	0.523	131	0.586	167	0.831	203	0.822	239	0.864	275	0.995	311	0.821	347	0.842
24	0.776	60	0.528	96	0.522	132	0.593	168	0.834	204	0.820	240	0.869	276	0.993	312	0.818	348	0.843
25	0.769	61	0.526	97	0.521	133	0.600	169	0.837	205	0.818	241	0.875	277	0.990	313	0.816	349	0.845
26	0.762	62	0.523	98	0.520	134	0.607	170	0.840	206	0.816	242	0.880	278	0.987	314	0.813	350	0.847
27	0.756	63	0.520	99	0.520	135	0.615	171	0.843	207	0.815	243	0.886	279	0.983	315	0.812	351	0.848
28	0.749	64	0.518	100	0.519	136	0.623	172	0.845	208	0.813	244	0.892	280	0.980	316	0.810	352	0.849
29	0.741	65	0.517	101	0.518	137	0.630	173	0.847	209	0.811	245	0.898	281	0.976	317	0.808	353	0.851
30	0.734	66	0.515	102	0.517	138	0.638	174	0.849	210	0.810	246	0.904	282	0.972	318	0.807	354	0.852
31	0.726	67	0.514	103	0.516	139	0.646	175	0.850	211	0.809	247	0.911	283	0.967	319	0.806	355	0.852
32	0.719	68	0.513	104	0.515	140	0.654	176	0.852	212	0.808	248	0.917	284	0.962	320	0.805	356	0.853
33	0.711	69	0.513	105	0.514	141	0.663	177	0.852	213	0.807	249	0.923	285	0.957	321	0.805	357	0.854
34	0.703	70	0.513	106	0.514	142	0.671	178	0.853	214	0.806	250	0.929	286	0.952	322	0.805	358	0.854
35	0.695	71	0.513	107	0.513	143	0.679	179	0.854	215	0.805	251	0.935	287	0.946	323	0.805	359	0.854

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.



AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-70006**
 Date **11-Feb-17**
 Call Letters **WTVV 27**
 Frequency **551 MHz**
 Antenna Type **TFU-19JSC/VP-R SP 4C170**

 Gain **1.64 (2.16dB)**
Calculated

 Directional
 Drawing # **4C170V D27**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.326	36	0.507	72	0.489	108	0.493	144	0.515	180	0.336	216	0.597	252	0.594	288	0.584
1	0.327	37	0.514	73	0.484	109	0.498	145	0.509	181	0.337	217	0.604	253	0.591	289	0.587
2	0.328	38	0.520	74	0.479	110	0.503	146	0.502	182	0.338	218	0.612	254	0.588	290	0.590
3	0.329	39	0.526	75	0.475	111	0.509	147	0.495	183	0.339	219	0.618	255	0.585	291	0.593
4	0.330	40	0.531	76	0.470	112	0.514	148	0.487	184	0.341	220	0.625	256	0.583	292	0.596
5	0.332	41	0.536	77	0.466	113	0.519	149	0.480	185	0.343	221	0.630	257	0.581	293	0.599
6	0.334	42	0.541	78	0.458	114	0.524	150	0.473	186	0.346	222	0.635	258	0.579	294	0.603
7	0.336	43	0.545	79	0.458	115	0.529	151	0.465	187	0.349	223	0.640	259	0.577	295	0.606
8	0.338	44	0.549	80	0.454	116	0.534	152	0.457	188	0.353	224	0.643	260	0.576	296	0.610
9	0.341	45	0.552	81	0.451	117	0.538	153	0.450	189	0.357	225	0.647	261	0.574	297	0.613
10	0.344	46	0.555	82	0.448	118	0.543	154	0.442	190	0.362	226	0.649	262	0.573	298	0.617
11	0.348	47	0.557	83	0.445	119	0.547	155	0.435	191	0.367	227	0.652	263	0.572	299	0.620
12	0.351	48	0.559	84	0.443	120	0.551	156	0.428	192	0.373	228	0.653	264	0.571	300	0.624
13	0.356	49	0.560	85	0.441	121	0.554	157	0.420	193	0.380	229	0.654	265	0.570	301	0.627
14	0.360	50	0.561	86	0.439	122	0.557	158	0.413	194	0.387	230	0.655	266	0.569	302	0.629
15	0.365	51	0.561	87	0.438	123	0.560	159	0.407	195	0.394	231	0.655	267	0.569	303	0.632
16	0.370	52	0.561	88	0.437	124	0.563	160	0.400	196	0.402	232	0.654	268	0.568	304	0.634
17	0.375	53	0.561	89	0.436	125	0.565	161	0.394	197	0.411	233	0.653	269	0.568	305	0.636
18	0.380	54	0.560	90	0.436	126	0.566	162	0.388	198	0.420	234	0.652	270	0.567	306	0.638
19	0.386	55	0.558	91	0.437	127	0.567	163	0.382	199	0.429	235	0.650	271	0.567	307	0.639
20	0.392	56	0.557	92	0.437	128	0.568	164	0.377	200	0.438	236	0.648	272	0.567	308	0.640
21	0.399	57	0.554	93	0.438	129	0.568	165	0.372	201	0.448	237	0.645	273	0.567	309	0.640
22	0.406	58	0.552	94	0.440	130	0.568	166	0.367	202	0.459	238	0.642	274	0.567	310	0.640
23	0.413	59	0.549	95	0.442	131	0.567	167	0.363	203	0.469	239	0.639	275	0.567	311	0.639
24	0.420	60	0.545	96	0.444	132	0.566	168	0.359	204	0.479	240	0.636	276	0.567	312	0.638
25	0.427	61	0.541	97	0.447	133	0.564	169	0.355	205	0.490	241	0.632	277	0.567	313	0.636
26	0.434	62	0.537	98	0.449	134	0.562	170	0.351	206	0.500	242	0.629	278	0.568	314	0.633
27	0.442	63	0.533	99	0.453	135	0.559	171	0.348	207	0.511	243	0.625	279	0.569	315	0.630
28	0.449	64	0.529	100	0.456	136	0.556	172	0.346	208	0.521	244	0.621	280	0.569	316	0.626
29	0.457	65	0.524	101	0.460	137	0.552	173	0.343	209	0.532	245	0.618	281	0.570	317	0.622
30	0.464	66	0.519	102	0.464	138	0.548	174	0.341	210	0.542	246	0.614	282	0.572	318	0.617
31	0.472	67	0.514	103	0.469	139	0.544	175	0.340	211	0.552	247	0.610	283	0.573	319	0.612
32	0.479	68	0.509	104	0.473	140	0.539	176	0.338	212	0.562	248	0.607	284	0.575	320	0.606
33	0.487	69	0.504	105	0.478	141	0.533	177	0.337	213	0.571	249	0.603	285	0.577	321	0.599
34	0.494	70	0.499	106	0.483	142	0.528	178	0.336	214	0.580	250	0.600	286	0.579	322	0.592
35	0.501	71	0.494	107	0.488	143	0.522	179	0.336	215	0.589	251	0.597	287	0.581	323	0.585

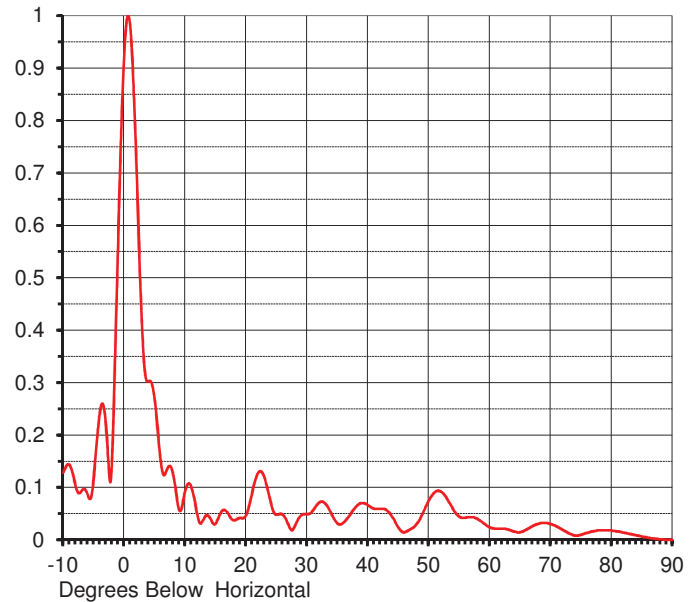
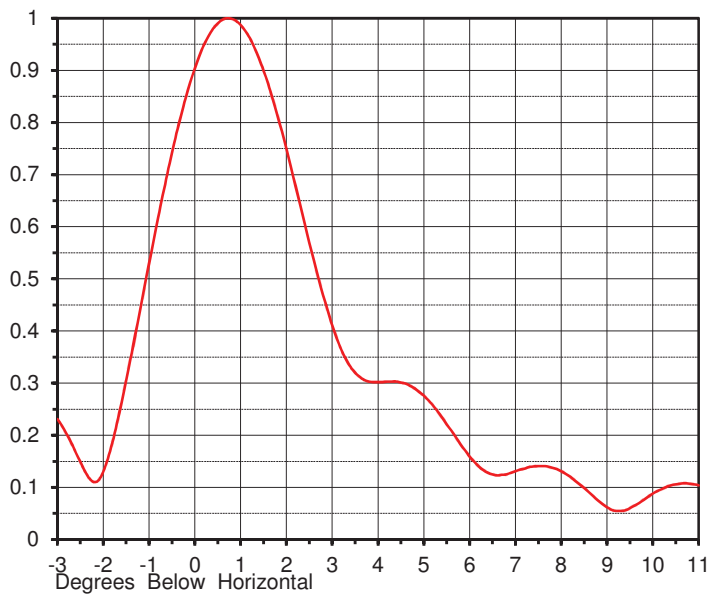
This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

ELEVATION PATTERN

Proposal No. **C-70006**
 Date **11-Feb-17**
 Call Letters **WVTV 27**
 Frequency **551 MHz**
 Antenna Type **TFU-19JSC/VP-R SP 4C17**

RMS Directivity at Main Lobe **18.00 (12.55 dB)**
 RMS Directivity at Horizontal **14.70 (11.67 dB)**
Calculated

Beam Tilt **0.75 deg**
 Drawing Number **19V180075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.128	10.0	0.088	30.0	0.049	50.0	0.073	70.0	0.030
-9.0	0.144	11.0	0.104	31.0	0.055	51.0	0.090	71.0	0.026
-8.0	0.109	12.0	0.053	32.0	0.070	52.0	0.092	72.0	0.019
-7.0	0.092	13.0	0.037	33.0	0.070	53.0	0.080	73.0	0.013
-6.0	0.089	14.0	0.044	34.0	0.052	54.0	0.060	74.0	0.008
-5.0	0.108	15.0	0.030	35.0	0.032	55.0	0.045	75.0	0.009
-4.0	0.235	16.0	0.053	36.0	0.032	56.0	0.042	76.0	0.013
-3.0	0.231	17.0	0.053	37.0	0.045	57.0	0.043	77.0	0.016
-2.0	0.130	18.0	0.037	38.0	0.061	58.0	0.040	78.0	0.018
-1.0	0.529	19.0	0.041	39.0	0.070	59.0	0.032	79.0	0.018
0.0	0.904	20.0	0.045	40.0	0.067	60.0	0.024	80.0	0.018
1.0	0.987	21.0	0.085	41.0	0.060	61.0	0.021	81.0	0.016
2.0	0.749	22.0	0.126	42.0	0.059	62.0	0.021	82.0	0.014
3.0	0.411	23.0	0.122	43.0	0.058	63.0	0.020	83.0	0.011
4.0	0.302	24.0	0.078	44.0	0.045	64.0	0.016	84.0	0.009
5.0	0.276	25.0	0.048	45.0	0.025	65.0	0.014	85.0	0.006
6.0	0.159	26.0	0.049	46.0	0.014	66.0	0.019	86.0	0.004
7.0	0.131	27.0	0.030	47.0	0.020	67.0	0.025	87.0	0.002
8.0	0.131	28.0	0.024	48.0	0.029	68.0	0.030	88.0	0.001
9.0	0.062	29.0	0.045	49.0	0.048	69.0	0.032	89.0	0.000
								90.0	0.000

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.